

Serial Number: 10/045,674

CRF Processing Date: 6/29/2002
Edited by: AR
Verified by: AR (STIC staff)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:
- ☐ Deleted extra, invalid, headings used by an applicant, specifically:
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☒ Corrected an obvious error in the response, specifically:
21507 response
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____



OIPE

RAW SEQUENCE LISTING

DATE: 06/27/2002

PATENT APPLICATION: US/10/045,674

TIME: 19:31:36

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

```

1 <110> APPLICANT: LADNER, ROBERT C.
2      COHEN, EDWARD H.
3      NASTRI, HORACIO G.
4      ROOKEY, KRISTIN L.
5      HOET, RENE
6      HOOGENBOOM, HENDRICUS R. J. M.
7 <120> TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING
8      DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY
9      OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL
10     LIBRARIES
11 <130> FILE REFERENCE: DYAX/002 CIP2
12 <140> CURRENT APPLICATION NUMBER: US/10/045,674
13 <141> CURRENT FILING DATE: 2001-10-25
14 <150> PRIOR APPLICATION NUMBER: 60/198,069
15 <151> PRIOR FILING DATE: 2000-04-17
16 <150> PRIOR APPLICATION NUMBER: 09/837,306
17 <151> PRIOR FILING DATE: 2001-04-17
18 <160> NUMBER OF SEQ ID NOS: 635
19 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 17
23 <212> TYPE: DNA
24 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
27     oligonucleotide
28 <400> SEQUENCE: 1
29     catgtgtatt actgtgc                                     17
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 44
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
37     oligonucleotide
38 <400> SEQUENCE: 2
39     cacatccgtg cttcttgcac ggatgtggca cagtaataca catg      44
41 <210> SEQ ID NO: 3
42 <211> LENGTH: 18
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

```

RAW SEQUENCE LISTING

DATE: 06/27/2002

PATENT APPLICATION: US/10/045,674

TIME: 19:31:36

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

```

47      oligonucleotide
48 <400> SEQUENCE: 3
49      gtgtattaga ctgctgcc                                18
51 <210> SEQ ID NO: 4
52 <211> LENGTH: 43
53 <212> TYPE: DNA
54 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
57      oligonucleotide
58 <400> SEQUENCE: 4
59      ggcagcagtc taatacacca catccgtggt ttccacggat gtg          43
61 <210> SEQ ID NO: 5
62 <211> LENGTH: 47
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
67      oligonucleotide
68 <400> SEQUENCE: 5
69      cacatccgtg ttgtttacac ggatgtgggtg tottacagtc cattctg    47
71 <210> SEQ ID NO: 6
72 <211> LENGTH: 20
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
77      oligonucleotide
78 <400> SEQUENCE: 6
79      cagaatggac tgtaagacac                                20
81 <210> SEQ ID NO: 7
82 <211> LENGTH: 43
83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
87      oligonucleotide
88 <400> SEQUENCE: 7
89      atcgagtctc actgagccac atccgtgggt ttccacggat gtg          43
91 <210> SEQ ID NO: 8
92 <211> LENGTH: 17
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
97      oligonucleotide
98 <400> SEQUENCE: 8
99      gctcagtgag actcgat                                  17
101 <210> SEQ ID NO: 9

```

RAW SEQUENCE LISTING

DATE: 06/27/2002

PATENT APPLICATION: US/10/045,674

TIME: 19:31:36

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

```

102 <211> LENGTH: 24
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
107     oligonucleotide
108 <220> FEATURE:
109 <221> NAME/KEY: modified_base
110 <222> LOCATION: (10)..(24)
111 <223> OTHER INFORMATION: A, T, C, G, other or unknown
112 <400> SEQUENCE: 9
W--> 113     cacgaggagn nnnnnnnnnn nnnn                                24
115 <210> SEQ ID NO: 10
116 <211> LENGTH: 19
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
121     oligonucleotide
122 <400> SEQUENCE: 10
123     atgaccgaat tgctacaag                                19
125 <210> SEQ ID NO: 11
126 <211> LENGTH: 46
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
131     oligonucleotide
132 <400> SEQUENCE: 11
133     gactcctcag cttcttgctg aggagtcctt gtagcaattc ggtcat        46
135 <210> SEQ ID NO: 12
136 <211> LENGTH: 6
137 <212> TYPE: PRT
138 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Description of Artificial Sequence: 6 His tag
141 <400> SEQUENCE: 12
142     His His His His His His
143         1             5
145 <210> SEQ ID NO: 13
146 <211> LENGTH: 10
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
151     oligonucleotide
152 <220> FEATURE:
153 <221> NAME/KEY: modified_base
154 <222> LOCATION: (6)..(10)

```

RAW SEQUENCE LISTING

DATE: 06/27/2002

PATENT APPLICATION: US/10/045,674

TIME: 19:31:36

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

```

155 <223> OTHER INFORMATION: A, T, C, G, other or unknown
156 <400> SEQUENCE: 13
W--> 157      gtctcnnnnnn                                10
159 <210> SEQ ID NO: 14
160 <211> LENGTH: 11
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
165      oligonucleotide
166 <220> FEATURE:
167 <221> NAME/KEY: modified_base
168 <222> LOCATION: (1)..(6)
169 <223> OTHER INFORMATION: A, T, C, G, other or unknown
170 <400> SEQUENCE: 14
W--> 171      nnnnnngaga c                                11
173 <210> SEQ ID NO: 15
174 <211> LENGTH: 24
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
179      oligonucleotide
180 <220> FEATURE:
181 <221> NAME/KEY: modified_base
182 <222> LOCATION: (11)..(24)
183 <223> OTHER INFORMATION: A, T, C, G, other or unknown
184 <400> SEQUENCE: 15
W--> 185      cacggatgtg nnnnnnnnnnn nnnn                24
187 <210> SEQ ID NO: 16
188 <211> LENGTH: 24
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
193      oligonucleotide
194 <220> FEATURE:
195 <221> NAME/KEY: modified_base
196 <222> LOCATION: (1)..(14)
197 <223> OTHER INFORMATION: A, T, C, G, other or unknown
198 <400> SEQUENCE: 16
W--> 199      nnnnnnnnnnn nnnncacatc cgtg                24
201 <210> SEQ ID NO: 17
202 <211> LENGTH: 14
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
207      oligonucleotide

```

RAW SEQUENCE LISTING

DATE: 06/27/2002

PATENT APPLICATION: US/10/045,674

TIME: 19:31:37

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

```

208 <400> SEQUENCE: 17
209      gtgtattact gtgc                                     14
211 <210> SEQ ID NO: 18
212 <211> LENGTH: 34
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
217      oligonucleotide
218 <400> SEQUENCE: 18
219      cacatccgtg cacggatgtg gcacagtaat acac                 34
221 <210> SEQ ID NO: 19
222 <211> LENGTH: 14
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
227      oligonucleotide
228 <400> SEQUENCE: 19
229      gtgtattaga ctgc                                     14
231 <210> SEQ ID NO: 20
232 <211> LENGTH: 34
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
237      oligonucleotide
238 <400> SEQUENCE: 20
239      gcagtctaatacaccacatc cgtgcacgga tgtg                 34
241 <210> SEQ ID NO: 21
242 <211> LENGTH: 34
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
247      oligonucleotide
248 <400> SEQUENCE: 21
249      cacatccgtg cacggatgtg gtgtattaca gtcc                 34
251 <210> SEQ ID NO: 22
252 <211> LENGTH: 14
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
257      oligonucleotide
258 <400> SEQUENCE: 22
259      ggactgtaag acac                                     14
261 <210> SEQ ID NO: 23
262 <211> LENGTH: 34

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/045,674DATE: 06/27/2002
TIME: 19:31:38Input Set : N:\Crf3\06112002\J045674.raw
Output Set: N:\CRF3\06272002\J045674.rawPlease Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 10,11,12,13,14,15,16,17,18,19,20,21,22,23,24
Seq#:13; N Pos. 6,7,8,9,10
Seq#:14; N Pos. 1,2,3,4,5,6
Seq#:15; N Pos. 11,12,13,14,15,16,17,18,19,20,21,22,23,24
Seq#:16; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14
Seq#:85; N Pos. 3,4,5,6,7,8,9
Seq#:86; N Pos. 4,5,6,7
Seq#:87; N Pos. 6,7,8,9,10,11
Seq#:88; N Pos. 1,2,3,4,5,6
Seq#:89; N Pos. 4,5,6,7
Seq#:90; N Pos. 3,9,12,21,30,33,39,51,57,60,69,72,75,87
Seq#:346; N Pos. 1,2,3,4,5,6
Seq#:347; N Pos. 6,7,8,9,10,11
Seq#:348; N Pos. 3,4,5,6,7,8,9
Seq#:349; N Pos. 7,8,9,10,11
Seq#:356; N Pos. 8,9,10,11,12,13,14,15
Seq#:357; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:358; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:359; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17
Seq#:360; N Pos. 7,8,9,10,11,12
Seq#:361; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:362; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19
Seq#:363; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18
Seq#:364; N Pos. 7,8,9,10,11,12
Seq#:365; N Pos. 7,8,9,10,11
Seq#:366; N Pos. 6,7,8,9,10
Seq#:367; N Pos. 6,7,8,9,10,11
Seq#:368; N Pos. 7,8,9,10,11,12,13,14,15,16
Seq#:369; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19
Seq#:370; N Pos. 7,8,9,10,11,12,13,14
Seq#:371; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:372; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:373; N Pos. 6,7,8,9,10,11
Seq#:374; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18
Seq#:375; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:376; N Pos. 6,7,8,9,10,11,12,13,14,15
Seq#:377; N Pos. 6,7,8,9,10,11,12,13
Seq#:378; N Pos. 6,7,8,9,10,11,12,13
Seq#:379; N Pos. 6,7,8,9,10
Seq#:380; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26
Seq#:381; N Pos. 5,6,7,8,9,10,11
Seq#:382; N Pos. 6,7,8,9,10
Seq#:383; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18
Seq#:384; N Pos. 6,7,8,9,10,11,12,13,14

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/045,674DATE: 06/27/2002
TIME: 19:31:38

Input Set : N:\Crf3\06112002\J045674.raw

Output Set: N:\CRF3\06272002\J045674.raw

Seq#:385; N Pos. 6,7,8,9,10,11,12,13
Seq#:386; N Pos. 5,6,7,8,9,10,11,12
Seq#:387; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19
Seq#:388; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:389; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:390; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:420; N Pos. 5,6,7,8,9
Seq#:421; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:422; N Pos. 4,5,6,7,8,9
Seq#:423; N Pos. 4,5,6,7,8
Seq#:424; N Pos. 4,5,6,7
Seq#:425; N Pos. 4,5,6,7,8
Seq#:426; N Pos. 4,5,6,7,8
Seq#:427; N Pos. 7,8,9,10,11,12
Seq#:428; N Pos. 4,5,6,7,8,9
Seq#:429; N Pos. 4,5,6,7,8
Seq#:430; N Pos. 1,2,3,4,5,6
Seq#:431; N Pos. 4,5,6,7,8,9
Seq#:432; N Pos. 4,5,6,7
Seq#:433; N Pos. 7,8,9,10,11
Seq#:434; N Pos. 1,2,3,4,5,6,7,8,9,10
Seq#:435; N Pos. 1,2,3,4,5,6,7,8,9
Seq#:436; N Pos. 5,6,7,8,9
Seq#:437; N Pos. 4,5,6,7,8,9
Seq#:438; N Pos. 4,5,6,7,8,9
Seq#:439; N Pos. 4,5,6,7,8,9
Seq#:440; N Pos. 4,5,6,7,8
Seq#:441; N Pos. 4,5,6,7,8
Seq#:442; N Pos. 4,5,6,7
Seq#:443; N Pos. 1,2,3,4,5,6
Seq#:444; N Pos. 7,8,9,10,11,12
Seq#:445; N Pos. 4,5,6,7,8
Seq#:446; N Pos. 7,8,9,10,11
Seq#:447; N Pos. 4,5,6,7,8
Seq#:448; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:449; N Pos. 1,2,3,4,5,6,7,8,9,10
Seq#:450; N Pos. 1,2,3,4,5,6,7,8,9
Seq#:496; N Pos. 22,23,24,28,29,30,34,35,36
Seq#:497; N Pos. 19,20,21,25,26,27,28,29,30,40,41,42,46,47,48
Seq#:499; N Pos. 4,5,6,7
Seq#:500; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
Seq#:501; N Pos. 4,5,6,7,8
Seq#:502; N Pos. 4,5,6,7
Seq#:503; N Pos. 1,2,3,4,5,6,7
Seq#:504; N Pos. 7,8,9,10,11,12
Seq#:505; N Pos. 4,5,6,7,8,9
Seq#:506; N Pos. 4,5,6,7,8
Seq#:507; N Pos. 7,8,9,10,11
Seq#:508; N Pos. 4,5,6,7,8

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/045,674DATE: 06/27/2002
TIME: 19:31:38Input Set : N:\Crf3\06112002\J045674.raw
Output Set: N:\CRF3\06272002\J045674.raw

Seq#:509; N Pos. 4,5,6,7,8
Seq#:510; N Pos. 4,5,6,7,8,9
Seq#:511; N Pos. 4,5,6,7,8
Seq#:512; N Pos. 1,2,3,4,5,6,7,8,9
Seq#:513; N Pos. 7,8,9,10,11
Seq#:514; N Pos. 5,6,7,8,9
Seq#:515; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:516; N Pos. 7,8,9,10,11
Seq#:517; N Pos. 1,2,3,4,5,6
Seq#:518; N Pos. 1,2,3,4,5,6,7,8,9,10
Seq#:519; N Pos. 7,8,9,10,11,12,13,14,15,16
Seq#:520; N Pos. 4,5,6,7,8
Seq#:521; N Pos. 4,5,6,7,8,9
Seq#:558; N Pos. 1,2,3,4,5,6,7,8,9
Seq#:559; N Pos. 7,8,9,10,11
Seq#:560; N Pos. 4,5,6,7
Seq#:561; N Pos. 7,8,9,10,11,12,13,14,15,16
Seq#:562; N Pos. 1,2,3,4,5,6,7,8,9,10
Seq#:563; N Pos. 7,8,9,10
Seq#:564; N Pos. 1,2,3,4,5
Seq#:565; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
Seq#:566; N Pos. 4,5,6,7,8,9
Seq#:567; N Pos. 7,8,9,10,11
Seq#:568; N Pos. 7,8,9,10,11,12
Seq#:569; N Pos. 4,5,6,7,8,9
Seq#:570; N Pos. 4,5,6,7,8
Seq#:571; N Pos. 7,8,9,10,11
Seq#:572; N Pos. 4,5,6,7,8
Seq#:573; N Pos. 4,5,6,7,8
Seq#:574; N Pos. 4,5,6,7,8
Seq#:575; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:576; N Pos. 5,6,7,8,9
Seq#:577; N Pos. 4,5,6,7,8,9
Seq#:578; N Pos. 4,5,6,7,8
Seq#:579; N Pos. 4,5,6,7
Seq#:580; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:581; N Pos. 4,5,6,7,8
Seq#:619; N Pos. 4,5,6,7
Seq#:625; N Pos. 7,8,9,10